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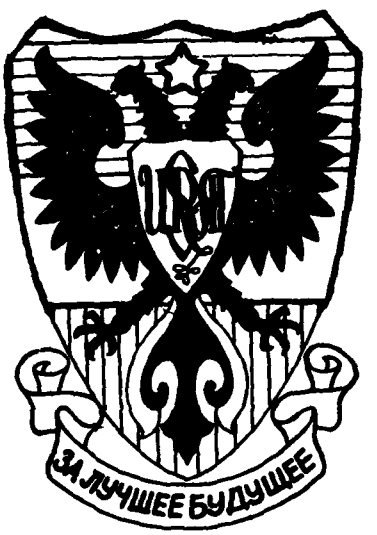

STUDENT RESEARCH REPORT

LESSONS LEARNED: 1973 MIDDLE EAST WAR
A SOVIET PERSPECTIVE

CPT RONNY B. BRAGGER
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A SOVIET PERSPECTIVE

Captain Ronny B. Bragger

June 1981

US ARMY RUSSIAN INSTITUTE

Garmisch, Germany

DEPARTMENT OF THE ARMY
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FOREWORD

This research project represents fulfillment of a student requirement for successful completion of the overseas phase of training of the Department of the Army's Foreign Area Officer Program (Russian).

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SUMMARY

In this paper the author discusses the lessons learned by the Soviet Union from the 1973 Middle East War. Reference is also made to the 1967 Middle East War as a basis for contrast with 1973. The major areas that were available to the author, from Soviet open sources, deal with: surprise, electronic warfare, tactics and fortifications. In identifying the Soviet "lessons learned" the author concludes that the Soviet military is evolving based upon these lessons, and that the Soviet armed forces will adopt new methods to incorporate these lessons learned.

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INTRODUCTION

The Soviets, in their military writings, often cite the "lessons learned" in World War Two as a basis for the development of their current military doctrine. Even articles concerning the most modern Soviet tactics may refer to experiences of the "Great Fatherland War". This should not delude the reader into believing that the Soviet Union plans to fight the Second World over again, in any future wars. The Soviets use the Second World War as a training vehicle, when applicable, but not as dogma for the modern battlefield. They realize that the art of warfare is changing and modernizing, and that new lessons, from new wars, must be incorporated into their military thinking. Although the bulk of the experiences cited in their military writings still come from the Second World War, the Soviets have written several articles citing experiences gained from an analysis of wars fought since the Second World War.

This paper will deal mainly with the lessons learned from the last Middle East war, in October 1973. In order to do this it also will be necessary to look at the lessons learned from some aspects of the June 1967 Arab-Israeli War to provide a basis for lessons learned in 1973. The thrust of the paper will deal with what the Soviets are writing for internal consumption in their military journals. Unfortunately, the Soviets are not as open in discussing their military analysis as are their western counterparts. Although ordinarily they do not oblige the researcher by publishing a comprehensive book or article covering the

full spectrum of lessons learned from a given war, it is possible to find information concerning the lessons that were learned from particular aspects of a war. These lessons are often cited in articles to emphasize a particular point or the importance of a particular weapon or tactic. In doing so they often refer to a western source as the basis for their conclusion or as a source of facts. The researcher must assume, since these references to western sources appear in periodicals intended for the internal consumption of the Soviet military, and since they are not contradicted by the author of the Soviet article, that the particular views expressed by cited western authors coincide with the views of the author of the article. However, this paper does not further assume that the views of the Soviet authors presented in this research necessarily represent the official views of the Soviet military. Soviet military journals are often used as a forum for the expression of differing views on a given issue. With this in mind, all that this author can hope to do is give the reader an idea of the types of lessons learned from the 1973 Middle East War that the Soviets have highlighted in their open military literature. It is not possible, given the literature available, to develop a comprehensive view of the official Soviet lessons learned from the 1973 Middle East War.

SURPRISE

One of the main factors in the series of wars fought between the Arabs and the Israelis has been the element of surprise. In 1956 Britain, France and Israel achieved it. Again, in 1967, surprise was on Israel's side. However, in 1973 it was the Arabs turn to enjoy the benefit of surprise. The importance of achieving surprise in warfare is recognized by the Soviets.

Major General V. Matsulenko addresses the issue of surprise in an article entitled: "*About Surprise in Local Wars*". In this article he points out that the Israelis were able to achieve surprise in 1956 by concealing their troop concentrations on the border. The Israelis employed camouflage, and moved to their jump-off positions according to a meticulous plan.[1]

By 1967 the methods of achieving surprise had become more complicated. In addition to using camouflage and a meticulous plan in concealing troop concentrations along the border, troops moved to the concentration areas only at night and under light discipline. Radio silence was maintained, except for the purpose of military disinformation. General Matsulenko cites the use of deceptive broadcasts that the Israelis made to the Arabs as a form of military disinformation.[2]

Another new means of achieving surprise present in 1967 and not in 1956 is what Matsulenko describes as "political camouflage". This involved the role that was played by the United States as an intermediary to help diffuse the growing crisis. General Matsulenko claims that by inviting a high level Egyptian delegation to Washington to discuss the situation,

and by conveying through the U.S. ambassador in Cairo the U.S. view that Israel would not attack, the U.S. was involved in "political camouflage".[3] Whether or not the U.S. was involved in "political camouflage" is not of major importance. What is important is that this article extends the concept of military deception into the political area as well. Matsulenko concludes his article with the general observation that, in order to achieve surprise, good intelligence about the enemy is needed.[4]

In an article about electronic warfare in the Israeli-Arab wars, Lieutenant General A. Paliy analyzed surprise as it pertained to the electronic warfare battle. Elaborating on the theme of the necessity of good intelligence, General Paliy identified specific Israeli intelligence collection targets prior to the outbreak of the 1967 war. In order to enhance their electronic warfare capability, the Israelis conducted a *thorough reconnaissance* prior to the outbreak of hostilities. This reconnaissance provided detailed information concerning radar station positions, surface to air missile systems, air defense batteries, command posts, main communications points and airfields. In addition to the physical reconnaissance described above General Paliy wrote that the Israelis "received data necessary for conducting electronic warfare". General Paliy credits this intelligence with enabling the Israelis to disrupt the Arab's system of radio communications, to include operating and reserve frequencies, of both military and governmental communications systems.[5]

On the first day of their attack the Israelis used the intelligence gained by their prior reconnaissance. The Israeli Air Force knocked out the Egyptian communications center for the Sinai front, while Israeli commandos knocked out the communications line between the Egyptian General Staff and the major units in the Sinai. In addition, Israeli radio

disinformation broke into Egyptian radio communications and gave false instructions to the Arab's air and armor forces.[6]

As a general rule, according to Paliy, in order to achieve surprise, from an electronic warfare standpoint, one should limit radio communications during the concentration of forces, while maintaining normal aircraft and other types of communications. Radar should also be operated normally.[7]

General Matsulenko cited the general lack of preparedness on the part of the Arab aviation and air defense forces as an element which allowed them to be surprised in 1967.[8] A basic way, of course, to minimize the chance of being surprised is to maintain a generally high state of readiness throughout the armed forces.

In 1973 it was the Israelis who were taken by surprise, both strategically and tactically. The Arabs had learned the lessons of the 1967 war well and used them against Israel. According to Colonels Nikitin and Petrov: "Arab governments paid attention to Israel's previous aggression and prepared to repulse it."[9]

It is interesting to note how many of the aspects, identified by Soviet authors, of Israel's successful surprise attack in 1967 were incorporated into the Arab plan in 1973. The Arabs followed a meticulous plan to bring their forces to their jump-off positions secretly. Concealment and camouflage were well used, as well as military and perhaps political disinformation and deception. The most important military deception involved the state of readiness of the SAM screen, which proved to be exceptionally well prepared for battle. What General Matsulenko has termed "political deception" may have been conducted by the Arabs. There is still debate as to whether a Palestinian hijacking of a trainload of

Soviet Jews, in Austria, was part of a "political deception" linked to the Arab surprise attack. If so, it was brilliant, as it focused the attention of the Israeli leadership on Austria when their attention should have been focused upon their own borders. Whether the hijacking was part of an overall deception plan, or not, this, coupled with Matsulenko's above cited accusation of the use of "political deception" by the United States in 1967, can now be considered to have opened a new means of helping to insure a military surprise.

ELECTRONIC WARFARE

In the area of electronic warfare the Arabs also learned their lessons well from 1967. General Paliy, in an article dealing solely with electronic warfare in the Arab-Israeli wars, made the following statement concerning the nature of the 1973 war: "The 1973 War was mainly a war of aircraft against air defense, and tanks against anti-tank weapons. Electronic warfare was more intensive in this war, based upon lessons learned in previous Middle East wars, and in Vietnam."[10] According to General Paliy the aim of the electronic warfare battle was to suppress enemy radio stations, which were used by aviation, air defense and armored units, while at the same time defending your own radio stations.[11]

With the onset of hostilities, physical measures were taken against electronic warfare targets. General Paliy contrasts the high degree of success enjoyed by Israel in 1967 in being able to physically disrupt Arab electronic communications, with their inability to do so in 1973.

> ...the Israelis in 1967 were able to launch a surprise attack on airfields, air defense systems, command posts, and radar posts, and thus insured themselves of superiority in the air and on the land. *In 1973 they were not able to do so.* Of 110 Israeli planes shot down in the first days of the war, 90% were destroyed by surface to air missiles and air defense artillery, and only 10% by aerial combat.[12]

In 1973 it was the Arabs who launched an immediate attack upon electronic warfare targets. On the first day of the war, 6 October 1973, Egyptian aviation struck at Israeli command and control points and centers of electronic warfare in the Sinai Peninsula, as well as at aviation command and control facilities at the airfields.[13]

> As a result the Israeli command post in the Sinai was put out of action, along with an electronic warfare center and several Hawk air defense missile complexes. The effectiveness of the bombings is shown by the fact that control of the Israeli forces in the Sinai was switched to the command post at El Arish, and interference with Egyptian radio communications and radar ended.[14]

It is interesting to note that the Egyptians considered the attack upon Israeli communication and control facilities to be so vital that they committed their air force to this mission on the first day of hostilities. This was despite the fact that throughout the war the general strategy of the Egyptians was to hold back their air force while the Israeli Air Force was weakened against the SAM screen.

In their attack upon the Israeli installations in the Sinai the Egyptian Air Force used counter-radar missiles, which put several radar stations out of service.[15] In addition to air attacks the Arabs also used recon-commando detachments to disrupt Israeli command and control.

> Thus, on 6 October Syrian commando detachments seized and destroyed radio-intelligence, radio-jamming, and command centers in the region of Mount Hermon...As a result the Israelis were deprived of the capability to conduct observation of the Syrian forces and to create interference against the radar, and radio communications of the armed forces of Syria.[16]

In addition to the physical destruction of Israeli facilities, the Arabs carried on an "electronic" battle against Israel. The Egyptian and Syrian armed forces were provided with high quality technology by the Soviet Union.[17] They used this equipment to conduct electronic warfare with the aim of disrupting the Israeli command and control stations, while at the same time defending their own stations against jamming and destruction by counter radar missiles.[18]

> Egyptian and Syrian radio jamming sub-units disrupted command and control radio communications to aircraft and ground forces, and suppressed the working of the guidance and control systems of Hawk missiles. As an example, on 6 October 1973, 79 Syrian planes under

> cover of active and passive radio interference, which was created by aircraft and ground stations, struck a massive blow on the Israeli forces in the region of the Golan Heights, while losing only one plane. According to the foreign press, the radio interference that was created was so effective that Israeli air defense units and fighters were not able to act against the Syrians.[19]

This type of electronic warfare coordination with combat units was not always the case during the war. General Paliy faulted the Egyptians for "carelessness" and "mismanagement" on the part of the military leadership in not insuring the coordination of radio jamming sub-units with radio reconnaissance. He further stated that the work of the electronic warfare units do not coincide with combat operations. General Paliy felt that this lack of coordination led to a situation in which the radio interference that was created did not always disrupt the command and control of enemy aviation and combined ground forces.[20]

With the onset of hostilities the electronic warfare battle of the 1973 war was initiated. The Egyptians and Syrians, in an effort to camouflage their radio-electronic units, kept shifting their positions. In addition, they employed several different types of radio-electronic stations in the air defense system. These operated on different frequencies, and in various modes. The Arabs also employed defensive measures, all with the aim of interfering with the ability of Israeli aviation to discover and suppress the radio-electronic stations of the air defense system.[21]

> In the opinion of foreign military specialists the reasons for the low effectiveness of the neutralization of the radio-electronic stations at the beginning of the war were the small number of electronic warfare units used and the narrow working-range of the frequencies of the radio jamming. Besides that, Israel supposedly did not have the means to conduct radio-interference against the radio-electronic stations that were guiding the surface-to-air missiles. The effectiveness of the radio-interference used by Israel was decreased due to the fact that in the mixed groups of air defense forces of Egypt and Syria several types of radio-electronic stations were used at the same time.[22]

The Israeli ability to counter the Arab electronic warfare threat was further hindered by the inability of Israeli intelligence to identify the new working frequencies of the Arab radar. These frequencies were not identified prior to hostilities.[23] In addition, American radio jammers such as the APR-25, APR-26 and APR-27, were not able to detect the working of separated radar of the Arabs, and thus were not able to warn the crews of the aircraft about radar tracking and the laying-on of anti-air missiles on the planes.[24]

General Paliy also cites equipment deficiencies, along with a laxness on the part of the Israeli pilots, as hindrances to the Israelis in the electronic warfare battle.

> According to knowledgable foreign military writers, the insufficient range of the Shrike missile obligated the Israeli pilots to go into the zone of operation of anti-aircraft missiles in order to fire them. Arab crews of radar stations that controlled anti-aircraft missiles took measures to combat anti-radar missiles. The lack of effectiveness of the Israeli planes' radio-interference methods is explained; not only by incorrect planning, insufficient coordination, unskilled tactical actions of the aviation, and inadequate knowledge by the personnel operating the electronic warfare equipment; but also, by the fact that some pilots did not switch on their radio-interference units since they were afraid that the signal would attract missiles and fighters.[25]

In addition to the above mentioned problem with the "Shrike" the Israelis also had an equipment problem in combating the "Strela" anti-air missile. General Paliy cites "foreign experts" in stating that the type of illuminating-flare bomb, used by the Israelis, was not effective against the "Strela". This was due to the fact that the radiation spectrum of that bomb was not like that of an airplane. Therefore, "Strela" was able to hit its target.[26]

After initially suffering heavy losses, due to an inability to combat the Arabs' use of missiles, and the electronic warfare, the Israelis were

forced to change their air tactics, and to enter into an electronic warfare battle.

> The Israeli Army had electronic warfare ground detachments. They were deployed, within the limits of the tactical zones, on the Golan Heights and in the Sinai. They used American radio-reconnaissance and radio-jamming equipment. These units detected the transmissions of ground and air radio stations in the range of 2,000 to 6,000 megahertz, determined the position of radar posts, command points, SAM positions, and conducted radio-jamming. Their aim was to disorganize the command and control of aviation and ground forces, as was done in 1967.[27]

According to General Paliy, foreign writers estimated that after using "mass methods" of electronic warfare Israeli losses decreased three-fold.[28]

Confronted with a highly effective SAM screen, the Israeli Air Force was forced to change its tactics, and its order of priorities. At first the Air Force had attempted to support the Israeli ground forces, while paying little attention to the missile screen. This led to heavy losses.

> Since the Israelis were taking heavy aircraft losses to air defense systems they shifted the basis of their attacks to the radar and guidance points of the air defense system. The Israelis also changed tactics from massed-attacks of groups of 24-30 planes to echeloned groups of four to eight planes. As a rule, the planes flew in at a maximum altitude of 20-25 meters. During the approach to the zone of operation of the Arab air defense system, the Israelis attacked the enemy radar from a distance of 20-25 kilometers, using counter-radar missiles, then they bombed the radar and air defense missile complex. They then destroyed the figher aircraft which were located at the airfields, and only after that did the Israeli Air Force shift to the support of the ground forces. In attacking air defense positions the Israeli aircraft used jamming, counter anti-aircraft maneuvers and distracting actions. Radio-interference was usually conducted by planes and helicopters which were flying over the territory.[29]

Attacks by the Israeli Air Force on Arab air defense positions were thoroughly planned in advance. About an hour before the strike-group left, piloted and drone aircraft were used to perform a reconnaissance

of the target. The specific air defense system was then analyzed; and the best electronic counter-measures to be used against the target were determined.[30]

In addition to using aircraft to attack the Arab missile screen, the Israelis also employed ground forces. When the Israeli forces crossed to the west bank of the Suez Canal; their armor and commandos destroyed the SAMs and radar of the Egyptian air defense screen.[31]

General Paliy presented the following general rule for aviation in a modern battlefield environment: "When faced with growing air defense capabilities, tactical aviation must continue to use special piloted and drone aircraft for the conduct of electronic warfare, which have the capability to defeat and suppress by jamming means of electronic warfare.[32]

While recognizing the importance of electronic warfare, Colonel Nikitin, in an article written in 1978, emphasized aircraft tactics as a counter to advanced air defense systems.

> Aviation combat operations in the 1973 Middle East War, showed, that, despite the rapid development of methods of radar-interference; one of the basic methods of defeating air defense systems remains the use of low altitude flight, which insures a concealed flight and a surprise strike upon the target.[33]

Realizing the vulnerability of air defense units to this type of aircraft approach the Arabs attempted to take precautions which would assure them of a warning of approaching aircraft.

> Experience in 1973 showed that aggressor aircraft, in order to achieve surprise, flew to their objectives using not only low and extremely low altitudes, but even flew nap-of-the-earth along mountain canyons and river valleys. This made it necessary for the air defense to use visual posts as well as radar.[34]

Although the article by General Paliy was mainly concerned with the use of electronic warfare in the battle between air defense and aviation, he devoted several paragraphs to the use of electronic warfare by the Israeli Navy.

> In the Israeli naval forces the electronic warfare battle was conducted with the help of methods based upon passive radio-interference and the launching of false targets...The missile boats operated mainly during the night in coordination with helicopters, which were simulating missile boats, and with planes which attacked the radar and artillery positions along the shore.[35]

General Paliy concludes his article with a general summary of what was learned in the Middle East wars concerning the use of electronic warfare. He also issues a warning that the western states are devoting significant attention to this area.

> The basic lesson of the Arab-Israeli wars of 1967 and 1973 is the increasing role and capabilities of electronic warfare in both offensive and defensive actions. After their completion, experience while conducting electronic warfare was analyzed by many capitalistic governments. Special attention should be given to the analysis of working frequencies, duration, frequency of movement, structure and other parameters of radio signals...[36]

General Paliy points out that, as a result of their studies of the Middle East wars, "abroad" several changes in the direction of research and exploration of the technology of electronic warfare have taken place.

> Instead of departmental methods they have started to create complexes, including equipment for radio-intelligence, active and passive interference of radio-electronic stations, anti-radar missiles, and false radar and heat targets. Tactical aircraft, helicopters, Army and carrier planes, are equipped with electronic warfare capabilities. Experience in local wars has shown that this significantly increases their effectiveness to fulfill their combat missions.[37]

In his article General Paliy identified some of the more recent developments in electronic warfare equipment. These included: drone electronic warfare aircraft, single use transmitters, methods of optical-electronic suppression, and self-guided missiles that not only can home-in on radio waves but also on infrared (heat) waves.[38]

General Paliy gave his Soviet readers the following warning: "In Western Europe they are working on electronic warfare based upon the

experience of the Arab-Israeli wars, for developing new methods of electronic warfare for the European theater of military operations."[39]

TACTICS

At the outset of the October War the Israeli Army attempted to use the same tactics that proved so successful in the 1967 war. Armored units were used as the main strike force, supported by air strikes. As already noted, due to the effectiveness of the Arab air defense missile screen, the Israeli Air Force first had to deal with the SAMs before it could support the ground forces. Thus, in the opening days of the war, SAM technology stripped Israeli armored units of air support. In addition, ATGM technology posed a new threat to armor.

> Tank units were the main strike forces in offensive operations in the Middle East. The attack by tank and mechanized forces, as a rule, was supported by aviation. Tanks attacked massed in the first echelon often without infantry support. Because of this, tank units suffered high losses in equipment.[40]

After making the above observation Colonel Nikitin cites American military writers' views that in the future an important role in the battle against tanks must be played by infantry, armed with modern anti-tank rockets.[41] In an earlier article, which Colonel Nikitin co-authored with Colonel Petrov, remarks made by then U.S. Secretary of Defense Schlesinger, concerning the future use of tanks, were quoted. "To be successful, tanks must be supported by artillery, aviation, and infantry on the flanks."[42] That same article cites as one of the "lessons of the war", the need for an "effective" and "uninterrupted" air defense.[43]

In analyzing "operational-tactical" lessons of the 1973 war, Colonel Nikitin reached the following conclusion:

> Success came to commanders of regiments and higher units who used initiative, applied maneuver forces and weapons and avoided frontal attacks. Both sides, in the course of the advance often dispatched diversionary groups to the enemy's rear. The aim of these groups was to disrupt command and control, and to break-up material-technical supply and replenishment.[44]

Experience in the Middle East wars was cited by Colonels Ivanov and Nesterov in an article they wrote concerning the survivability of artillery units. They quoted then Soviet Minister of Defense Marshal A. A. Grechko who stated:

> Experience of Middle East conflicts testify to changes which had begun to show in methods of tactical actions of ground forces, specifically, about the growing role of long range artillery battles. It calls forth, that current weapons permit effective hits on enemy tanks, firing from far distances. As a result, advancing infantry, left without needed tank support, suffer more losses, and their attack either peters out, or loses striking power and doesn't reach its assigned aims.[45]

The war in the Middle East is where the Soviets credit the birth of "long range artillery battles". Counter-battery battles occurred at maximum distances.[46]

> Helicopter fire-support was used to destroy artillery. The helicopters were armed with surface-to-surface missiles, which were capable of suppressing a battery with a single salvo if the battery was structured according to a "classical" pattern, and was caught by surprise.[47]

Thus, Colonels Ivanov and Nesterov recommended changing the combat formation of a battery.[48] In addition, they cite the need for paying closer attention to battery self-defense. "Above all, their screening from helicopters and low-flying planes must become more effective. Coordination between artillery and air defense should be increased to effectively use air defense methods."[49]

Ivanov and Nesterov also addressed the issue of the survivability of anti-tank artillery. They called for increased attention to the survivability of these weapons systems. "In an equal degree attention to

survivability is necessary for anti-tank artillery, in particular, sub-units of anti-tank missiles, in all stages of their actions: in the deployed region, on the march, line of deployment, in an ambush etc..."[50] Their conclusion is that: "Survivability must be uppermost in the mind of artillery commanders."[51]

FORTIFICATIONS

Colonels Nikitin and Petrov, in their article about the 1973 Middle East War, citing "American authors", stated: "Defensive positions, such as the Bar-Lev Line, became, to a degree, vulnerable. The Bar-Lev Line was built upon the lessons of 1967 which demanded a dense, deep, impenetrable defense..."[52] Colonel Levykin wrote a more detailed study of the fortifications used in the 1973 war. "The construction of the installations, as specialists note, complied with American technical directions for conventional wars."[53] Colonel Levykin noted several faults with the Israeli fortifications.

> Protection of the entrances and firing ports was not provided for. Camouflage was practically non-existent. This lowered the effectiveness of the fortifications defense, and subsequently gave the Egyptians the opportunity to destroy and suppress the firing points of the first-line of fire of artillery and tanks, with direct fire.[54]

> Between the fortified points in the line of fortifications existed significant intervals, between 10-12 kms., almost not covered by fire and obstacles. The fortified points had an expanse of front up to 300 meters and a depth of 200 meters, it was clearly not sufficient...Israeli fortifications on the Syrian front took on the same characteristics as on the canal; however, the density of defense, (the number of fortified points per kilometer of front) was significantly higher...[55]

Colonel Levykin cited the following main conclusions of foreign military specialists:

> Of specific significance is the necessity to obtain defense in depth, which must include fortified points on the first line and rear defense lines. In order to force carefully prepared water obstacles, in particular if the laying of sectional bridges is necessary, it is required that a powerfully fortified bridgehead be built. The jump-off area for the advance, as experience showed, must earlier be provided with engineering constructions. This is considered an important guarantee: not only of the success of the advance, but also of a reliable defense in the event of a surprise counterattack by the enemy.[56]

Levykin credits "foreign specialists" with the general conclusion that: "Military actions in the Middle East, once again, after the Second World War, have reaffirmed the close mutual dependence of tactics and fortifications."[57] He then goes on to elaborate upon the specifics of this dependence.

> Experience showed that even the most powerful fortification cannot insure the success of the battle, if it is not supplemented by efficient tactical operations of forces, a well organized system of fire, timely and hidden maneuvers of forces and weapons, appropriate camouflage, intelligence, and uninterrupted and strict control. On the other hand, even the most simply fortified field position, used correctly and in a timely fashion, can strongly influence the success of the battle.[58]

Far from viewing the failure of the Bar-Lev Line as a death knell to fortifications, Colonel Levykin cited "foreign specialists" as supporting the expenditure of resources on their construction.

> The opinion of the majority of foreign specialists concludes that: engineering preparation of a locality has to be taken seriously in contemporary battle conditions. This justifies the expenditure of forces and resources during the conduct of a battle, and significantly decreases the loss of personnel and equipment.[59]

CONCLUSION

This paper does not purport to represent the totality of lessons learned from the Middle East wars. The articles cited are what were available in open sources. There is undoubtedly much more that the Soviets have learned, and have classified. This paper does not assume that everything that the cited articles contain is correct. There are factual and conceptual errors. However, the articles do represent the perceptions of the Middle East wars, on a limited range of topics, held by some senior Soviet officers. Their views, which were expressed in these articles do not necessarily represent a concensus view within the Soviet military. The purpose of this paper is simply to point out areas that the Soviets are emphasizing, and to point out that the Soviets are constantly learning from new wars, and are evolving their military thinking accordingly.

Because of the evolution of Soviet military thinking, when considering the lessons that the United States has learned from various wars it is also necessary to consider what the Soviets have learned from the same wars The American military must be aware that the Soviet armed forces are constantly evolving, and that the U.S. must stay one step ahead of them in this process.

FOOTNOTES

[1]Major-General V. Matsulenko, "About Surprise in Local Wars", Military History Journal, April 1979, p. 61.

[2]Ibid., p. 63.

[3]Ibid., p. 62.

[4]Ibid., p. 65.

[5]Lieutenant-General A. Paliy, "Radio-electronic Warfare in Israeli-Arab Wars", Military History Journal, July 1980, p. 65.

[6]Ibid., p. 66.

[7]Ibid.

[8]Matsulenko, p. 64.

[9]Colonel N. Nikitin and Col. S. Petrov, "Aggression of Israel in October 1973", Military History Journal, November 1974, p. 86.

[10]Paliy, p. 66.

[11]Ibid.

[12]Ibid., p. 68.

[13]Ibid., p. 70.

[14]Ibid.

[15]Ibid.

[16]Ibid.

[17]Ibid.

[18]Ibid.

[19]Ibid.

[20]Ibid.

[21]Ibid.

[22]Ibid., p. 68.

[23]Ibid.

[24]Ibid.

[25]Ibid.

[26]Ibid., p. 67.

[27]Ibid., p. 69.

[28]Ibid.

[29]Ibid., p. 68.

[30]Ibid.

[31]Ibid., p. 69.

[32]Ibid., p. 68.

[33]Colonel N. Nikitin, "Several Operational-Tactical Lessons of Local Wars of Imperialism", Military History Journal, December 1978, p. 65.

[34]Colonel F. Shesterin, "Air Defense in Local Wars", Military History Journal, November 1977, p. 81.

[35]Paliy, pp. 68-69.

[36]Ibid., p. 71.

[37]Ibid.

[38]Ibid.

[39]Ibid.

[40]Nikitin, p. 63.

[41]Ibid., p. 64.

[42]Nikitin and Petrov, p. 88.

[43]Ibid., p. 87.

[44]Nikitin, pp. 63-64.

[45]Colonel V. Ivanov and Colonel V. Nesterov, "Question of Survivability of Artillery Subunits", Military Herald, October 1975, p. 80.

[46]Ibid., p. 81.

[47]Ibid.

[48]Ibid., p. 82.

[49]Ibid.

[50]Ibid., p. 83.

[51]Ibid.

[52]Nikitin and Petrov, p. 88.

[53]Colonel V. Levykin, "Fortified Defensive Positions in the Arab-Israeli War", Military Herald, June 1976, p. 123.

[54]Ibid.

[55]Ibid.

[56]Ibid., p. 124.

[57]Ibid.

[58]Ibid.

[59]Ibid.

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